Message

From: Mead, Ralph N. [meadr@uncw.edu]
Sent: 7/4/2017 5:36:25 PM
To: Mark Strynar [Ex. 6 Personal Privacy (PP)]; Strynar, Mark [Strynar.Mark@epa.gov]
Subject: Re: method for GenX analysis

Hi Mark,

No worries, I figured you have been swamped! I will be gone as well until July 23rd so lets reconnect then.

Have a great 4th!

Ralph

From: Mark Strynar [Ex. 6 Personal Privacy (PP)]
Sent: Tuesday, July 4, 2017 7:23 AM
To: Mead, Ralph N.; Strynar, Mark
Subject: Re: method for GenX analysis

Ralph,

I have not forgotten you. Just been way to busy with the analysis I have needed to do for NC DEQ. Also, I have a family [Ex. 6 Personal Privacy (PP)] am trying to squeeze all this in before I depart. In all reality, the best case scenario will likely be when I get back from vacation. However, I think I could send you a stock solution of GenX and 4 other PFAS I have so you could begin some MS/MS work. Does that sound good?

Mark

On Fri, Jun 30, 2017 at 4:05 PM, Mead, Ralph N. <meadr@uncw.edu> wrote:

> Hi Mark,
>
> I hope all is well. I wanted to touch base with you and find out if you have narrowed down when you could come to UNCW. Have a great July 4th!
>
> Cheers,
> Ralph

From: Mark Strynar [Ex. 6 Personal Privacy (PP)]
Sent: Wednesday, June 21, 2017 6:11 AM
To: Mead, Ralph N.
Subject: Re: method for GenX analysis

Yes we switched from HLB in the Nakayama et al

,2007 work. In the Nakayama et al. 2009 or 2010? Work on the Upper Mississippi Basin Rivers Association (UMBRA) effort we switched to the WAX cartridge as it isolates the shorter chain acids much better and the anslytes from mayrix interferents.

We usually use the WAX plus (phase amount 250 mg?) But the 3cc or 6 cc have worked. Not sure of the phase amount.
Mark

On Jun 20, 2017 8:28 AM, "Mead, Ralph N." <meadr@uncw.edu> wrote:

Hi Mark,

Yes I have most of the items below. What mass of sorbent for the 6 cc WAX cartridges would you recommend? Did you switch phases from the Nakayama et al paper? In there you used HLB phase.

Talk to you soon,

Ralph

-- Ralph N. Mead Ph.D.
Professor
Dobo 242b
Department of Chemistry and Biochemistry
UNCW
Office: 910-962-2447

From: Mark Strynar Ex. 6 Personal Privacy (PP)
Date: Tuesday, June 20, 2017 at 8:02 AM
To: Ralph Mead <meadr@uncw.edu>
Subject: Re: method for GenX analysis

Ralph,
I will send my SOP tomorrow when i am back in the office. Here are some needed consumables:
Ammonium hydroxide in water, hplc grade methanol, good quality DI water, sodium acetate solid, glacial acetic acid, Waters Oasis WAX spe cartridges (plus style if you have, otherwise cartridge style work - 3 cc or 6 cc), buchner funnel vacuum apparatus for filtration of water (I have filters), an SPE vacuum manifold or SPE concentrator pump, a way to concentrate the methanol eluted sample (Nevap, or turbo vap or similar) with dry N2 gas.

Some centrifuge tubes to recieve eluted samples are needed. I use BD Falcon PP 15 ml tubes, HPLC vials0.5 to 2 ml range, caps.

Other standard lab equipment i am sure you have include balances, pipettes and tips, graduated cylinders (1 liter), various glass and plastic ware.

I can supply the standards and isotope labeled GenX. Also any items you are lacking I could bring along. Not sure yet about timing. I am working this out with my boss.

Mark

On Jun 19, 2017 8:26 AM, "Mead, Ralph N." <meadr@uncw.edu> wrote:

Hi Mark,

Ok that sounds good. I am in town until the middle of next month. Do you have a list of consumables that you will need? I want to make sure I have them on hand.

Talk to you soon.

Take care,

Ralph

-- Ralph N. Mead Ph.D.
Professor
Dobo 242b
Department of Chemistry and Biochemistry
UNCW
Office: 910-962-2447

From: "Strynar, Mark" <Strynar.Mark@epa.gov>
Date: Monday, June 19, 2017 at 8:03 AM
To: Ralph Mead <meadr@uncw.edu>, Mark Strynar Ex. 6 Personal Privacy (PP) Stephen Skrabal <skrabals@uncw.edu>
Subject: RE: method for GenX analysis

I am not sure of a time frame. However, our existing SOP could be used simply substituting in the GenX. I have MRM transitions for the native and stable isotope labeled analog. I need to go to Athens, GA next week to teach the methods to the R4 EPA staff so they can have a capability.

I will get back in touch.

Mark

From: Mead, Ralph N. [mailto:meadr@uncw.edu]
Sent: Friday, June 16, 2017 11:06 AM
To: Mark Strynar Ex. 6 Personal Privacy (PP) >; Strynar, Mark <Strynar.Mark@epa.gov>; Skrabal, Stephen <skrabals@uncw.edu>
Subject: Re: method for GenX analysis

Hi Mark,

I would be happy to learn the method. We have the LC/MS capabilities here as well with access to both low res and high res MS instrumentation. What is your time frame?

Take care,

Ralph

-- Ralph N. Mead Ph.D.

Professor

Dobo 242b

Department of Chemistry and Biochemistry

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Office: 910-962-2447

From: Mark Strynar <Ex. 6 Personal Privacy (PP)>
Date: Friday, June 16, 2017 at 7:33 AM
To: Ralph Mead <meadr@uncw.edu>, "Strynar, Mark" <strynar.mark@epa.gov>, Stephen Skrabal <skrabals@uncw.edu>
Subject: method for GenX analysis

Ralph and Steve,

It seems our ES&T work has really caused a big stir. I have developed analytical methods for analysis of GenX (and many other polyfluoroether compounds) in surface, waste and drinking water. I am wondering if someone at UNCW in your department has and LC-MS/MS and some SPE concentration apparatus that would want to do some local water testing. I am concerned that NCDEQ and Chemours will have the only available data on GenX and will hold it close to the vest. I am glad to teach it to whomever then they are a local expert. I believe I will be asked very soon to make my method a lab validated peer reviewed published method.

I am off today so I am using my personal email.

Mark